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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/824,330	04/02/2001	James Michael Nelson	56081USA8A.002	9412	
32692	7590 01/12/2006		EXAMINER		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427			HANDY, D	HANDY, DWAYNE K	
	MN 55133-3427		ART UNIT PAPER NUMBER		
			1743		

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			$\sigma$		
	Application No.	Applicant(s)			
Office Action Commons	09/824,330	NELSON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Dwayne K. Handy	1743			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tinuity will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. mely filed the mailing date of this communication (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 31 Oc	ctober 2005.				
	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-14 is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-14</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) acce		Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correcti	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121	(d).		
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).			
1. Certified copies of the priority documents					
2. Certified copies of the priority documents	• •				
3. Copies of the certified copies of the prior		ed in this National Stage			
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •				
* See the attached detailed Office action for a list of	of the certified copies not receive	<b>3</b> ₫.			
Attachment(s)					
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D				
B) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal F	Patent Application (PTO-152)			
Paper No(s)/Mail Date <u>10/03/05</u> .	6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-5, 6 and 8-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bergh et al. (6,749,814). This rejection was made in the previous Office Action (mailed 6/30/2005). It remains in effect. Please see Response to Arguments below.

### Inventorship

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al. (6,749,814) in view of Priddy et al. (4,572,819). This rejection was made in the previous Office Action (mailed 6/30/2005). It remains in effect. **Please see**Response to Arguments below.
- 6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al. (6,749,814) in view of Citron et al. (6,586,541). This rejection was made in the previous Office Action (mailed 6/30/2005). It remains in effect. **Please see Response to Arguments below.**

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## Response to Arguments

- 7. Applicant's arguments filed 10/31/2005 with respect to the reference "Bergh ('814)" have been fully considered but they are not persuasive. Applicant has argued that since Bergh ('814) does not contain the axial heating profile disclosure of the first cited Bergh reference (US2002/0170976), then Bergh ('814) does not teach the changing of reaction variables over time in individual reactors. The Examiner respectfully disagrees. In columns 43-45, Bergh teaches the varying of parameters including temperature and pressure. Applicant has also highlighted passages from column 44 and column 45 to support their arguments, but these passages are mostly directed to group control of the reactors. The Examiner believes these passages also contain teachings of varying reaction parameters for *each reactor*. The Examiner directs applicant specifically to column 44, lines 24-26 and also lines 43-50. In lines 24-26, Bergh clearly states that the individual reactors can be temperature controlled in addition to the group control to which Applicant has referred. Lines 43-50 recite varying the pressure for individual reactors in addition to the entire group.
- 8. In addition to the passages cited from columns 43-45, the Examiner also directs applicant to column 67, lines 16-67. In the passage from column 67, Bergh teaches the optimization of a chemical reaction by *independently or collectively* (line 35) varying the temperature, pressure, residence time, and reactant or catalyst amounts for two or more reactors. Bergh then goes on to specify that the parameters that may be

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controlled individually in the reactors include temperature and (lines 50-52) and pressure (lines 52-53).

#### Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne K. Handy whose telephone number is (571)-272-1259. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DKH January 8, 2006

Jili Warden
Supervisory Patent Examiner
Technology Center 1700